

Climate change and global warming continue to dominate international political discussion, and the discussions of the IOC and host countries are no exception. The upcoming Vancouver 2010, London 2012 and Sochi 2014 Organising Committees are all committed to leaving a legacy that their Games are remembered as being green.

London 2012: Environmentally Friendly

London 2012 has placed sustainability firmly at the heart of its bid, framed by the concept of towards "A one Planet 2012", which was derived from the WWF/Bioregional concept of "One Planet Living®". London's vision for "a One Planet 2012" will focus on five main areas throughout the different phases of the Games: combating climate change; reducing waste; enhancing biodiversity; promoting inclusion and encouraging healthy living. Monitoring of the sustainability impact of LOCOG is carried out by an independent body called The Commission for a Sustainable London 2012, and via reporting of sustainability issues in the annual London 2012 Update and Report Card reports.

The 2012 Olympic and Paralympic Games will be hosted in compliance with the British Standard for Sustainable Events (BS 8901).

The ODA is currently on track or exceeding the wide-ranging set of sustainability targets for the London 2012 construction project. For example, the ODA is currently delivering 60% of materials by weight by rail or water transport, beating a target of 50% and dramatically reducing vehicle movements and the resulting carbon emissions. 90% of construction waste is being diverted from landfill and is being reused or recycled instead. In terms of effective planning for sustainability, one strong example of many is that the Olympic Park area has been designed to benefit from a significantly reduced risk of flooding with measures such as river widening, strengthening flood defences and sustainable urban drainage being implemented. More than 4000 trees, 74,000 plants, 60,000 bulbs and 300,000 wetlands plants will be planted to create new open green space for London – the largest planting project ever undertaken in the UK.



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Sustainability

London is the first Summer Host City to embed sustainability into the planning of the Games. From the outset, LOCOG committed to a number of sustainability initiatives to ensure that the Games would be environmentally friendly. These key issues are: to use venues already existing in the UK where possible; and to only make permanent structures that will have a long-term use after the Games; to build temporary structures for everything else.

LOCOG intend to use the Games as a catalyst for change, for the regeneration of and improvement of quality of life in East London and as a means of promoting sustainability across the UK.

Vancouver 2010

In Vancouver, a number of sustainability initiatives have been put in place, ranging from venues that are built to high environmental standards to waste management strategies

The London 2012 Sustainability Plan

The London 2012 Sustainability Plan is entitled: *Towards a One Planet 2012*, and focuses on five key themes:

1. **Climate change:** The need to minimise greenhouse gas emissions and to ensure that legacy facilities are equipped to cope with the impacts of climate change.
2. **Waste:** Minimisation of waste, including a commitment that no waste will be sent to landfill during Games-time; encouragement of

the development of new waste processing infrastructure in East London.

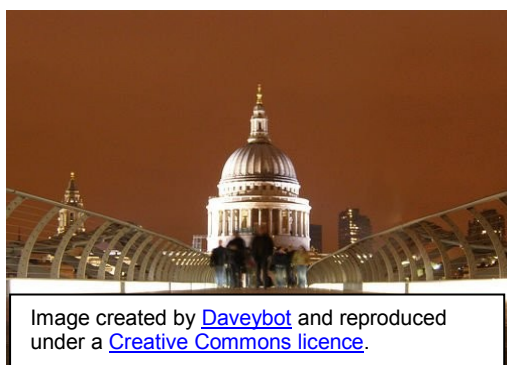
3. Biodiversity: Minimisation of the impact of the London 2012 Games on wildlife and their habitats in and around Games venues

4. Inclusion: Promotion of access for all; celebration of the diversity of London and the UK, and the creation of new employment, training and business opportunities for the British workforce.

5. Healthy living: To inspire British people to take up sport and increase their physical activity levels in a way that is sustainable for them.

Each key area must be underpinned by effective strategies for planning, implementation and delivery across a range of operational areas. Whilst further details of the comprehensive strategic guidelines can be found in the [London 2012 Guidelines – Individual, Corporate and Public Events First Edition](#)), this case study will consider three specific and pertinent operational areas that are, according to the aforementioned report, central to the effective planning of the Games: i) the Impacts on venue and local area, ii) transport and travel, and iii) Health, Safety & Security.

i) Impacts on venue and local area



In the planning of mega-events such as the Olympic and Paralympic Games, the localised impacts on the environment and communities (including along routes to and from the venue) must be considered and made allowance for. Such considerations might concern noise and litter, and the physical impacts that the event might exert on natural habitats of wildlife. Key issues and measures that one must include

when planning a mega-event thus must include:

- ❖ consultation and cooperation with neighbouring landowners, communities and public authorities, emergency services etc;
- ❖ safeguards for features of ecological, landscape cultural or archaeological importance (eg location of public access routes, fencing, signage, stewarding);
- ❖ location of haulage routes and storage compounds for materials;
- ❖ measures to prevent spillages of hazardous substances;
- ❖ monitoring and managing noise;
- ❖ minimising light spill from event and security lighting;
- ❖ implementing contingencies to 'make good' any damage caused by the event.

A good example of effective planning and consultation activity was recently demonstrated by LOCOG in the planning stages of their bid to use Greenwich Park as a Games venue.

LOCOG has consulted widely with local people and stakeholders (including Royal Parks, English Heritage, Natural England and other statutory bodies) about plans to use Greenwich Park as an Olympic venue during the 2012 Games, listening to and addressing concerns.

According to Neilsen, LOCOG's market research partner, nearly 85% of Greenwich residents support the use of the Park as an Olympic site. This research informed LOCOG that residents were generally happy as long as the Park was not closed for more than 6 weeks and if no damage was done to the Park or its surroundings. This has led to plans for the Park to be used as an equestrian site.

Sebastian Coe, LOCOG Chair commented that:

'Greenwich Park is one of London's treasures and it will be a wonderful sporting venue for the world to enjoy in the summer of 2012.'

..We take our responsibilities seriously - we know the people of Greenwich love their beautiful Park, and we have spent considerable time developing our plans to make sure we protect it. Our planning application shows the lengths we are going to in order to make sure we return the Park to The Royal Parks and the local community in the condition in which we will gratefully receive it.'

No doubt residents of Greenwich will be closely monitoring progress in the promises afforded to them by LOCOG before, during and after the Games, including LOCOG's promise to create 100 hectares of extra green space in the London area, which will reduce the risk of flooding in, and enrich the biodiversity of, the Lower Lea Valley.

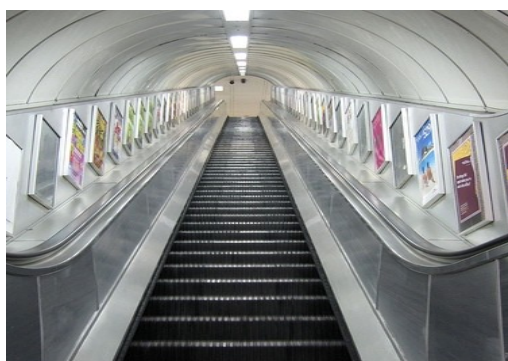


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ii) Transport and travel

Before London had won the right to stage the Games, London's transport infrastructure was viewed as one of the weakest parts of our bid. The bid team managed to effectively manage this issue, ensuring that our plans for transport improvements met the requirements of the IOC.

Olympics Minister Tessa Jowell commented that: *'Reliable and efficient transport will be crucial to the success of London 2012 and we are determined to get it right...'* *'Railway lines, trains and stations are being upgraded to cope with the thousands of athletes, volunteers and spectators who will travel to the Games each day. We want to make sure spectators have a choice of ways to get to the Games, whether it's by public transport, bicycle or on foot.'*

Sustainability and transport issues remains a key issue of the bid, as the improvements made to our transport infrastructure have proved costly and extensive, and question marks still remain over the eventual ability of the underground, bus and road network to satisfy the needs of spectators and athletes in 2012. The need to manage transport emissions and local congestion are potentially the most significant environmental impacts that London will face in relation to its transport solutions.

Key considerations for all stakeholders involved in the Games (athletes, officials, spectators, residents of London, volunteers, etc) include:

- ❖ prioritising public transport, cycle and walk modes as the best way to get to the venue;
- ❖ highlighting accessible transport routes;
- ❖ maximising use of shared transport, rather than individual vehicles;
- ❖ utilising accessible vehicles where appropriate;
- ❖ utilising low emission vehicles where public transport is not an option;
- ❖ reducing the distance, travel time and number of journeys required

In terms of sustainability, London seems to be effectively hitting targets for the achievement of a lasting legacy for the people of London, with LOCOG Chairman Sebastian Coe commenting that:

'These transport improvements demonstrate again what is meant by London 2012's vision to use the power of the Games to inspire lasting change. Not only are they essential to ensure a memorable experience for athletes, spectators and the general public during Games-time, but their lasting legacy will deliver benefits for commuters and families for years to come.'

It would be interesting, however, to gauge Londoner's current attitudes towards the infrastructure developments as inevitably, large portions of the underground network have to be regularly closed for development

work and disruption to regular services is inevitable.

iii) Health, safety and security

Security issues are of great importance in today's world. The threat of terrorist activity is always a consideration of large-scale events, and the Olympic and Paralympic Games are no exception. The need to also ensure the safety of children is also an ongoing concern. Measures to ensure that these factors are dealt with in an effective way include:

- ❖ ensuring a risk assessment has been carried out and appropriate control measures are in place, e.g. for trip, slip and fall hazards, crowd pinch points;
- ❖ ensuring that contractors, exhibitors and vendors submit appropriate risk assessments and method statements in accordance with statutory obligations;
- ❖ ensuring that contractors, exhibitors and vendors have sufficient relevant Product and Public Liability Insurance;
- ❖ where children or young people are involved in an event, ensure that sufficient child protection measures are in place. Seek advice from your Child Protection Officer where necessary;
- ❖ providing the appropriate measures and resources to ensure a secure environment.

LOCOG have ensured a close legislative and practical working relationship with all relevant organisations to ensure that adequate security is provided at the 2012 Games. This includes consultation with the following key partners: The Home Office, the Association of Chief Police Officers, the Metropolitan Police Service, Dorset Police, Essex Police, Hertfordshire Constabulary and Thames Valley Police (relevant as events such as Sailing, Mountain Biking and Rowing will take place under the jurisdiction of these forces), the Government Olympic Executive (GOE), the London Fire Brigade and London Ambulance

Service, the Department for Transport, and any other government departments and agencies that are involved in the provision of safety and security.

Global Sport and Sustainability

Of course, sustainability issues affect all mega-sports events, not only the London 2012 Games. Such pertinent issues were discussed on a global scale at the 8th World Conference on Sport and the Environment (Vancouver, March 2009). The theme of the Conference - "Innovation and Inspiration - Harnessing the Power of Sport for Change" recognised the role sports organisations in the development of innovative solutions to the sustainability issues that the world currently faces.

During the Conference, the IOC presented awards for outstanding contributions in the field of sustainability, sport and the environment to sports organisation in each of the five representative continents of Africa, America, Asia, Europe and Oceania. The awards were presented to the Green Africa Foundation (Africa), the Oregon Track Club (America), the Beijing Municipal Environmental Protection Bureau and the Beijing 2008 Olympic Games Organising Committee (Asia), the German Olympic Sports Confederation – DOSB (Europe) and Rowing New Zealand's Rainbow Project (New Zealand). A brief summary of each of these organisations/projects are now presented.

Green Africa Foundation

Founded in Kenya in 2000, the objective of The Green Africa Foundation is to support ecological and environmental conservation.

Particular focus is given to conservational issues associated with the maintenance of arid and semi-arid lands in Kenya, where poverty within the country is most prevalent. The 'Green Africa Sports' department of the Foundation has drawn up guidelines for sports organisers that relate to environmental awareness, waste management, and the creation and maintenance of a green environment.

The Oregon Track Club

The 2008 US Olympic Team Trials constituted the first sporting event in North America to successfully implement and uphold sustainable initiatives, such as those outlined in the Olympic Movement's Agenda 21. Sustainability initiatives included the provision of shuttles, promotion of cycling, use of renewable energy, the reduction of waste and the encouragement of recycling and composting throughout the event.

The Beijing Municipal Environmental Protection Bureau

The Bureau successfully raised awareness of environmental issues, which led to major advances in the areas of energy consumption, sustainable water consumption, transport, waste management and air quality. Over 160 environmental and sustainability projects were implemented as a result of The Beijing Games in 2008, significantly raising the bar globally for incorporation of sustainability and related environmental issues at all future large scale sporting events.

The German Olympic Sports Confederation

The Confederation championed green issues via its 'Green champions in sport and environment' guide. The Guide provides guidance in environmental issues and highlights examples of good practices

undertaken in Germany, analysing ecological impact of projects via consideration of factors associated with climate, transport, energy, waste, use of materials, noise, nature and landscape, catering, merchandising and communications. The Confederation had, in this way, taken an effective 360° view of the effects of all stakeholders involved in the development and delivery of large scale sports events on the environment.

"The Rainbow Project" New Zealand

Rowing New Zealand are responsible for the development of the successful and effective Rainbow Project, which aims to host an environmentally sustainable 2010 FISA World Rowing Championships whilst at the same time respecting the beautiful and unique environment of New Zealand's Lake Karapiro. Notably, the Project includes plans for a carbon emission reduction scheme, a zero-waste plan, educational programmes, a comprehensive bio-security strategy for inbound equipment, environmental protection for all permanent and temporary infrastructures, and the inclusion of an environmental officer on the organising committee.

FIND OUT MORE:

The Environmental Sustainability of the London 2012 Olympic and Paralympic Games Report

<http://www.london.gov.uk/assembly/reports/environment/2012-sustainable-olympics.pdf>

Sochi 2014

In Sochi, the organisers have joined initiatives such as UNEP's Climate Neutral Network, and are putting in place environmental policies for greener Games in 2014.

CREDITS

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